## **ABSTRACT**

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When a projection plane is not uniform due to colors and patterns on the projection plane and ambient environmental light, a reproduced image projected by a projector is made to appear in desired colors. A color correcting apparatus is used, comprising association unit (21), association storage memory 22, color information acquisition unit (23), color conversion calculation unit (23), color conversion storage memory (25), and color correction unit (26). Association unit (21) acquires captured image (7) generated by capturing image (5) projected onto projection plane (2) to establish an association between pixels of image (5) and pixels of captured image (7). Association storage memory (22) records the association. Color information acquisition unit (23) acquires second color information as color information for each pixel of the captured image. Color conversion calculation unit (23) calculates a color conversion for each pixel of the image based on first color information, second color information, and the association. Color conversion storage memory (25) records the color conversion. Color correction unit (26) corrects the input image for colors on a pixel-by-pixel basis using the color conversion.